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Factsheet

ROUGH BLUEGRASS

(Revision of Factsheet "Rough Bluegrass", June 1981)

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PLANT DESCRIPTION

Rough bluegrass (*Poa trivialis L.*) is a yellowish-green grass with soft leaf blades which are glossy beneath and have a narrow boat-shaped tip. It spreads by stolons and forms dense thick patches. The leaf blades are upright at first, but tend to lay down and mat as the patches become older. Because the root system is shallow, the patches are easily pulled up in tufts or clumps.

GENERAL CHARACTERISTICS

Rough bluegrass is capable of forming a reasonable turf under certain limited environmental conditions and careful management. It is fine-textured turfgrass developing a high shoot density under cool, moist conditions. It is capable of withstanding a considerable amount of shade if sufficient moisture is present. It is one of the most winter hardy turfgrasses with very good low temperature tolerance.

The major weaknesses of rough bluegrass include poor wear, drought and high temperature tolerance. In home lawns in Southern Ontario, it is considered to be one of the top three most serious grassy weeds. It is sometimes included in a seed mixture with Kentucky bluegrass because of its shade tolerance. However, due to its tendency to produce bright yellow-green patches, it does not blend well with Kentucky bluegrass (Figure 1). It responds vigorously to fertilizer and irrigation, and under conditions where water is supplied too frequently, it becomes intolerably aggressive and smothers out the Kentucky bluegrass. During July and August patches of rough bluegrass wilt and brown-out markedly unless careful attention is paid to its water requirements (Figure 2).

Since rough bluegrass has limited use as a turfgrass only a limited number of improved cultivars have been developed which are more tolerant of high temperature stress and turf diseases and have an improved dark green colour. Refer to OMAF Publication 384, *Recommendations for Turfgrass Management* for information on available cultivars.

Rough bluegrass is not recommended for home lawn use. However, it competes well in cool moist areas where cutting heights are as low as 1 to 2 cm. It grows well in wet meadows, and particularly well in light-shaded areas which are moist, such as under weeping willows, along stream banks, and in other moist or poorly-drained areas that are not subject to drought. While recommended for wet shade situations, it seldom provides a good lawn if the area is dry.

Figure 1. A management program providing too much fertilizer and water promoted the infestation of the Kentucky bluegrass lawn by the bright yellow-green aggressive rough bluegrass.

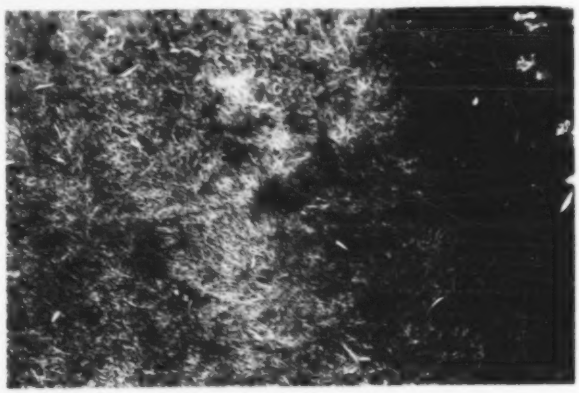

Figure 2. Rough bluegrass turns brown under high summer temperatures.

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CONTROL

Where rough bluegrass has invaded a Kentucky bluegrass home lawn, it is usually desirable to remove it from the sward. The following practices have provided some control:

1. Careful control of the frequency of irrigation. Apply water to the lawn only when the Kentucky bluegrass is showing drought symptoms, that is turning dark green and the leaf blades wilting. The shallow-rooted, drought susceptible rough bluegrass will be under stress, grow less, and be much less competitive. As the rough bluegrass is reduced in vigor, the Kentucky bluegrass will take over as the dominant grass. The reduction of the rough bluegrass by careful control of the watering program will take some time, 2 years or more, and the lawn will frequently have a poor appearance as the patches of rough bluegrass wilt, become brown and die out. However, as the Kentucky bluegrass takes over, the lawn will markedly improve.

2. Mechanical removal of the rough bluegrass with a garden rake offers considerable success, especially if done in early spring when the plants are readily pulled out of the moist soil. The rake tines catch the horizontal stolons and pull them out with limited disturbance to the Kentucky bluegrass (Figure 3). For larger areas, a power-driven vertical mower will cut out the stolons. In both cases, the thinning process allows the Kentucky bluegrass to more effectively compete and fill in the invaded areas. Mechanical removal is successful during the initial stages of the invasion when the patches are small (15 cm) and where the lawn contains at least 70% Kentucky bluegrass. When the rough bluegrass occupies 50 to 60% of the lawn area, control solely by this method is difficult.

Figure 3. The long stringy stolons of the rough bluegrass may be caught by the tines of a garden rake and removed by an early spring raking.

3. When the patches become 60 to 100 cm in diameter the rough bluegrass sod should be removed and the section either seeded or sodded. Overseeding thick heavy undisturbed patches of rough bluegrass is difficult and only occasionally successful.

4. At the present time, there are no herbicides available which will selectively remove rough bluegrass from a Kentucky bluegrass lawn.

5. For heavily infested lawns, the homeowner is advised to carry out a complete renovation program. Have the lawn treated with a non-selective herbicide when the rough bluegrass is actively growing. Allow sufficient time for the herbicide to translocate through the stolons (10 to 14 days) and then either overseed or resod the lawn. (For additional information refer to the OMAF Factsheet, *Lawn Renovation*, and Publication 529, *Weed Control in Lawns and Gardens.*)

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